Circle the answer that makes the most sense to you.

- 1. What causes night and day?
 - a. The Earth spins on its axis.
 - b. The Earth moves around the Sun.
 - c. Clouds block out the Sun's light.
 - d. The Earth moves into and out of the Sun's shadow.
 - e. The Sun goes around the Earth
- 2. Which of these things would revolve rather than rotate?
 - a. An electric train running on a circular track.
 - b. A tire rolling down the road.
 - c. A toy spinning on the floor.
 - d. A fan blowing air in a room.

3. What is the movement of the Earth on its axis called?

- a. Phases
- b. Flotation
- c. Revolution
- d. Rotation

4. What is the movement of the Earth around the Sun called?

- a. Precipitation
- b. Random Movement
- c. Revolution
- d. Rotation

5. What event is caused by Earth's revolution?

- a. The apparent shift in the path of a pendulum.
- b. Movement of planetary wind to the right in the Northern Hemisphere.
- c. The apparent rising and setting of the Sun.
- d. Different constellations observed in the night sky throughout the year.
- 6. What causes the apparent movement of objects across the sky during a day or night on Earth?
 - a. Revolution of Earth in its orbit.
 - b. Rotation of Earth on its axis.
 - c. Location of Earth in space.
 - d. Objects are moving around the Earth.

7. Which of the following could be represented with a model?

- a. An object, but not and event or process.
- b. An event or process, but not an object.
- c. An object, event, or process.
- d. Neither an object, nor an event, nor a process.

8. In what ways can a model be different from the thing it represents?

- a. A model can be different from the thing it represents in both size and shape.
- b. A model can be different from the thing it represents in its shape but not its size.
- c. A model can be different from the thing it represents in its size, but not its shape.
- d. A model must be the same size and shape as the thing it represents.

9. A student wants to make a simple model of the solar system to help her compare how long it would take for a spaceship to travel between different planets. Which of the following things is absolutely essential for her to do in order to think about how long it would take?

- a. She must accurately represent the relative distance between the planets, and also make sure that the model of each planet looks like the planet it represents.
- b. She must make sure that the model of each planet looks like the planet it represents, but she does not need to accurately represent the relative distance between the planets.
- c. She must accurately represent the relative distance between the planets, but does not need to make sure that the model of each planet looks like the planet it represents.
- d. She does not need to accurately represent the relative distance between the planets, and she does not need to make sure the model of each planet looks like the planet it represents.
- 10. Which of the following are representations of the Earth?
 - a. A world map but not a globe.
 - b. A globe but not a world map.
 - c. Both a world map and a globe.
 - d. Neither a world map nor a globe.
- 11. Which of the following statements describe why an engineer might use the model of a machine?
 - a. To show someone else what the machine is like, or to help himself think about how the machine works.
 - b. To show someone else what the machine is like, not to help himself think about how the machine works.
 - c. To help him think about how the machine works, but not to show someone else what the machine is like.
 - d. Neither to show someone else what the machine is like nor to help think about how the machine works.

For questions 12-15, circle the face you most agree with:

12. To me, SCIENCE is:











boring

uninteresting

means nothing

interesting

exciting

13. To me, MATH is:











boring

uninteresting

means nothing

interesting

exciting

14. To me, TECHNOLOGY is



15. To me, a JOB in science, technology, engineering, or mathematics is:













boring

uninteresting

means nothing

interesting

exciting